ABSTRACT OF THE DISCLOSURE

There is provided an image pickup apparatus that is capable of eliminating the influence of errors attributed to differences in characteristics between lens devices attached to the image pickup apparatus such as a camera or errors attributed to differences in characteristics between optical component elements within the main body of the image pickup apparatus, to thereby enable setting a proper exposure compensation value. An image pickup device receives light passing through a lens device and outputs an image signal, and a photometric sensor receives the light passing through the lens device and outputs luminance information. A main control circuit sets an exposure compensation value according to an output from the photometric sensor. Specifically, the main control circuit sets a first exposure compensation value according to the luminance information outputted from the photometric sensor, to cause the image pickup device to carry out a first storage of the light passing through the lens device, based on the set first exposure compensation value, and sets a second exposure compensation value according to the result of the first storage, to cause the image pickup device to carry out a second storage of the light passing through the lens device, based on the set second exposure compensation value.